

ABSTRACT OF THE DISCLOSURE

A variable capacity rotary compressor capable of varying a compression capacity thereof. The variable capacity rotary compressor includes a housing defined therein with first and second compressing chambers having different volumes, a rotating shaft adapted to rotate in the first and second compressing chambers, a compressing unit arranged in the first and second compressing chambers, and adapted to perform a compression operation in a selected one of the first and second compressing chambers in accordance with a change of a rotating direction of the rotating shaft, and a drive motor adapted to rotate the rotating shaft in a first direction or in a second direction, the drive motor being variable in rotating speed in accordance with an electrical control operation. The variable capacity rotary compressor can achieve a multi-stage variation in capacity thereof within a wide range while reducing a variation range of rotating speed, as compared to conventional cases, because it is possible not only to mechanically vary the capacity of the compressing device in accordance with a change of the rotating direction of the drive motor, but also to control the rotating speed of the drive motor in accordance with an electrical control method.